



Rec'd PCT/PTO 23 JUL 2003 #5

SEQUENCE LISTING

<110> INCYTE CORPORATION
 HILLMAN, Jennifer L.
 BANDMAN, Olga
 GUEGLER, Karl J.
 CORLEY, Neil C.
 BAUGHN, Mariah R.
 AZIMZAI, Yalda
 LAL, Preeti G.
 LY, Dyung Aina M.

<120> HUMAN PHOSPHOLIPASES

<130> PF-0625 USN

<140> US 09/830,321

<141> 2001-04-24

<150> US 09/181,317

<151> 1998-10-27

<150> US 60/219,311

<151> 1998-10-27

<150> US 09/234,726

<151> 1999-01-21

<150> US 60/172,257

<151> 1999-01-21

<160> 10

<170> PERL Program

<210> 1

<211> 145

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 2641779CD1

<400> 1

Met	Glu	Leu	Ala	Leu	Leu	Cys	Gly	Leu	Val	Val	Met	Ala	Gly	Val
1				5					10					15
Ile	Pro	Ile	Gln	Gly	Gly	Ile	Leu	Asn	Leu	Asn	Lys	Met	Val	Lys
			20					25						30
Gln	Val	Thr	Gly	Lys	Met	Pro	Ile	Leu	Ser	Tyr	Trp	Pro	Tyr	Gly
			35					40						45
Cys	His	Cys	Gly	Leu	Gly	Gly	Arg	Gly	Gln	Pro	Lys	Asp	Ala	Thr
			50					55						60
Asp	Trp	Cys	Cys	Gln	Thr	His	Asp	Cys	Cys	Tyr	Asp	His	Leu	Lys
			65					70						75

Thr	Gln	Gly	Cys	Gly	Ile	Tyr	Lys	Asp	Tyr	Tyr	Arg	Tyr	Asn	Phe	
				80					85					90	
Ser	Gln	Gly	Asn	Ile	His	Cys	Ser	Asp	Lys	Gly	Ser	Trp	Cys	Glu	
			95						100					105	
Gln	Gln	Leu	Cys	Ala	Cys	Asp	Lys	Glu	Val	Ala	Phe	Cys	Leu	Lys	
			110						115					120	
Arg	Asn	Leu	Asp	Thr	Tyr	Gln	Lys	Arg	Leu	Arg	Phe	Tyr	Trp	Arg	
			125						130					135	
Pro	His	Cys	Arg	Gly	Gln	Thr	Pro	Gly	Cys						
				140					145						

<210> 2

<211> 605

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1430683CD1

<400> 2

Met	Ile	Phe	Val	Glu	Leu	Ser	Pro	Thr	Leu	Ala	Leu	Cys	Leu	Glu	
1				5					10					15	
Arg	Val	Ala	Ser	His	Leu	Thr	Asp	Thr	Gly	Leu	Leu	Val	Leu	Phe	
				20					25					30	
Cys	Pro	Ala	Pro	Cys	Pro	Phe	Phe	Phe	Phe	Phe	Glu	Met	Glu	Ser	
				35					40					45	
Leu	Ser	Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Arg	Asp	Leu	Gly	Ser	
				50					55					60	
Leu	Gln	Pro	Pro	Pro	Leu	Gly	Phe	Lys	Arg	Phe	Ser	Cys	Leu	Ser	
				65					70					75	
Leu	Pro	Ser	Ser	Trp	Asp	Tyr	Arg	Leu	Arg	Glu	Leu	Ala	Val	Arg	
				80					85					90	
Leu	Gly	Phe	Gly	Pro	Cys	Ala	Glu	Glu	Gln	Ala	Phe	Leu	Ser	Arg	
				95					100					105	
Arg	Lys	Gln	Val	Val	Ala	Ala	Ala	Leu	Arg	Gln	Ala	Leu	Gln	Leu	
				110					115					120	
Asp	Gly	Asp	Leu	Gln	Glu	Asp	Glu	Ile	Pro	Val	Val	Ala	Ile	Met	
				125					130					135	
Ala	Thr	Gly	Gly	Gly	Ile	Arg	Ala	Met	Thr	Ser	Leu	Tyr	Gly	Gln	
				140					145					150	
Leu	Ala	Gly	Leu	Lys	Glu	Leu	Gly	Leu	Leu	Asp	Cys	Val	Ser	Tyr	
				155					160					165	
Ile	Thr	Gly	Ala	Ser	Gly	Ser	Thr	Trp	Ala	Leu	Ala	Asn	Leu	Tyr	
				170					175					180	
Glu	Asp	Pro	Glu	Trp	Ser	Gln	Lys	Asp	Leu	Ala	Gly	Pro	Thr	Glu	
				185					190					195	
Leu	Leu	Lys	Thr	Gln	Val	Thr	Lys	Asn	Lys	Leu	Gly	Val	Leu	Ala	
				200					205					210	
Pro	Ser	Gln	Leu	Gln	Arg	Tyr	Arg	Gln	Glu	Leu	Ala	Glu	Arg	Ala	
				215					220					225	
Arg	Leu	Gly	Tyr	Pro	Ser	Cys	Phe	Thr	Asn	Leu	Trp	Ala	Leu	Ile	
				230					235					240	
Asn	Glu	Ala	Leu	Leu	His	Asp	Glu	Pro	His	Asp	His	Lys	Leu	Ser	

	245		250		255
Asp Gln Arg Glu	Ala Leu Ser His Gly	Gln Asn Pro Leu Pro	Ile		
	260		265		270
Tyr Cys Ala Leu	Asn Thr Lys Gly Gln	Ser Leu Thr Thr Phe	Glu		
	275		280		285
Phe Gly Glu Trp	Cys Glu Phe Ser Pro	Tyr Glu Val Gly Phe	Pro		
	290		295		300
Lys Tyr Gly Ala	Phe Ile Pro Ser Glu	Leu Phe Gly Ser Glu	Phe		
	305		310		315
Phe Met Gly Gln	Leu Met Lys Arg Leu	Pro Glu Ser Arg Ile	Cys		
	320		325		330
Phe Leu Glu Gly	Ile Trp Ser Asn Leu	Tyr Ala Ala Asn Leu	Gln		
	335		340		345
Asp Ser Leu Tyr	Trp Ala Ser Glu Pro	Ser Gln Phe Trp Asp	Arg		
	350		355		360
Trp Val Arg Asn	Gln Ala Asn Leu Asp	Lys Glu Gln Val Pro	Leu		
	365		370		375
Leu Lys Ile Glu	Glu Pro Pro Ser Thr	Ala Gly Arg Ile Ala	Glu		
	380		385		390
Phe Phe Thr Asp	Leu Leu Thr Trp Arg	Pro Leu Ala Gln Ala	Thr		
	395		400		405
His Asn Phe Leu	Arg Gly Leu His Phe	His Lys Asp Tyr Phe	Gln		
	410		415		420
His Pro His Phe	Ser Thr Trp Lys Ala	Thr Thr Leu Asp Gly	Leu		
	425		430		435
Pro Asn Gln Leu	Thr Pro Ser Glu Pro	His Leu Cys Leu Leu	Asp		
	440		445		450
Val Gly Tyr Leu	Ile Asn Thr Ser Cys	Leu Pro Leu Leu Gln	Pro		
	455		460		465
Thr Arg Asp Val	Asp Leu Ile Leu Ser	Leu Asp Tyr Asn Leu	His		
	470		475		480
Gly Ala Phe Gln	Gln Leu Gln Leu Leu	Gly Arg Phe Cys Gln	Glu		
	485		490		495
Gln Gly Ile Pro	Phe Pro Pro Ile Ser	Pro Ser Pro Glu Glu	Gln		
	500		505		510
Leu Gln Pro Arg	Glu Cys His Thr Phe	Ser Asp Pro Thr Cys	Pro		
	515		520		525
Gly Ala Pro Ala	Val Leu His Phe Ser	Ser Gly Val Arg Arg	Thr		
	530		535		540
Pro Glu Glu Ala	Ala Ala Gly Glu Val	Asn Leu Ser Ser Ser	Asp		
	545		550		555
Ser Pro Tyr His	Tyr Thr Lys Val Thr	Tyr Ser Gln Glu Asp	Val		
	560		565		570
Asp Lys Leu Leu	His Leu Thr His Tyr	Asn Val Cys Asn Asn	Gln		
	575		580		585
Glu Gln Leu Leu	Glu Ala Leu Arg Gln	Ala Val Gln Arg Arg	Arg		
	590		595		600
Gln Arg Arg Pro	His				
	605				

<210> 3

<211> 456

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1316804CD1

<400> 3

Met	Pro	Pro	Gly	Pro	Trp	Glu	Ser	Cys	Phe	Trp	Val	Gly	Gly	Leu
1				5					10					15
Ile	Leu	Trp	Leu	Ser	Val	Gly	Ser	Ser	Gly	Asp	Ala	Pro	Pro	Thr
				20					25					30
Pro	Gln	Pro	Lys	Cys	Ala	Asp	Phe	Gln	Ser	Ala	Asn	Leu	Phe	Glu
				35					40					45
Gly	Thr	Asp	Leu	Lys	Val	Gln	Phe	Leu	Leu	Phe	Val	Pro	Ser	Asn
				50					55					60
Pro	Ser	Cys	Gly	Gln	Leu	Val	Glu	Gly	Ser	Ser	Asp	Leu	Gln	Asn
				65					70					75
Ser	Gly	Phe	Asn	Ala	Thr	Leu	Gly	Thr	Lys	Leu	Ile	Ile	His	Gly
				80					85					90
Phe	Arg	Val	Leu	Gly	Thr	Lys	Pro	Ser	Trp	Ile	Asp	Thr	Phe	Ile
				95					100					105
Arg	Thr	Leu	Leu	Arg	Ala	Thr	Asn	Ala	Asn	Val	Ile	Ala	Val	Asp
				110					115					120
Trp	Ile	Tyr	Gly	Ser	Thr	Gly	Val	Tyr	Phe	Ser	Ala	Val	Lys	Asn
				125					130					135
Val	Ile	Lys	Leu	Ser	Leu	Glu	Ile	Ser	Leu	Phe	Leu	Asn	Lys	Leu
				140					145					150
Leu	Val	Leu	Gly	Val	Ser	Glu	Ser	Ser	Ile	His	Ile	Ile	Gly	Val
				155					160					165
Ser	Leu	Gly	Ala	His	Val	Gly	Gly	Met	Val	Gly	Gln	Leu	Phe	Gly
				170					175					180
Gly	Gln	Leu	Gly	Gln	Ile	Thr	Gly	Leu	Asp	Pro	Ala	Gly	Pro	Glu
				185					190					195
Tyr	Thr	Arg	Ala	Ser	Val	Glu	Glu	Arg	Leu	Asp	Ala	Gly	Asp	Ala
				200					205					210
Leu	Phe	Val	Glu	Ala	Ile	His	Thr	Asp	Thr	Asp	Asn	Leu	Gly	Ile
				215					220					225
Arg	Ile	Pro	Val	Gly	His	Val	Asp	Tyr	Phe	Val	Asn	Gly	Gly	Gln
				230					235					240
Asp	Gln	Pro	Gly	Cys	Pro	Thr	Phe	Phe	Tyr	Ala	Gly	Tyr	Ser	Tyr
				245					250					255
Leu	Ile	Cys	Asp	His	Met	Arg	Ala	Val	His	Leu	Tyr	Ile	Ser	Ala
				260					265					270
Leu	Glu	Asn	Ser	Cys	Pro	Leu	Met	Ala	Phe	Pro	Cys	Ala	Ser	Tyr
				275					280					285
Lys	Ala	Phe	Leu	Ala	Gly	Arg	Cys	Leu	Asp	Cys	Phe	Asn	Pro	Phe
				290					295					300
Leu	Leu	Ser	Cys	Pro	Arg	Ile	Gly	Leu	Val	Glu	Gln	Gly	Gly	Val
				305					310					315
Lys	Ile	Glu	Pro	Leu	Pro	Lys	Glu	Val	Lys	Val	Tyr	Leu	Leu	Thr
				320					325					330
Thr	Ser	Ser	Ala	Pro	Tyr	Cys	Met	His	His	Ser	Leu	Val	Glu	Phe
				335					340					345
His	Leu	Lys	Glu	Leu	Arg	Asn	Lys	Asp	Thr	Asn	Ile	Glu	Val	Thr
				350					355					360
Phe	Leu	Ser	Ser	Asn	Ile	Thr	Ser	Ser	Ser	Lys	Ile	Thr	Ile	Pro

	365		370		375
Lys Gln Gln Arg Tyr Gly Lys Gly Ile	Ile Ala His Ala Thr Pro				
	380		385		390
Gln Cys Gln Ile Asn Gln Val Lys Phe	Lys Phe Gln Ser Ser Asn				
	395		400		405
Arg Val Trp Lys Lys Asp Arg Thr Thr	Ile Ile Gly Lys Phe Cys				
	410		415		420
Thr Ala Leu Leu Pro Val Asn Asp Arg	Glu Lys Met Val Cys Leu				
	425		430		435
Pro Glu Pro Val Asn Leu Gln Ala Ser	Val Thr Val Ser Cys Asp				
	440		445		450
Leu Lys Ile Ala Cys Val					
	455				

<210> 4
 <211> 592
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> Incyte ID No: 2641779CB1

<400> 4
 tctgcctcca ctgctctgtg ctgggatcat ggaacttgca ctgctgtgtg ggctgggtgt 60
 gatggctgggt gtgattccaa tccagggcgg gatcctgaac ctgaacaaga tgggtcaagca 120
 agtgactggg aaaatgccca tctctccta ctggccctac ggctgtcact gcggactagg 180
 tggcagaggc caacccaaag atgccacgga ctgggtgtgc cagacccatg actgctgcta 240
 tgaccacctg aagaccacagg ggtgcggcat ctacaaggac tattacagat acaacttttc 300
 ccaggggaac atccactgct ctgacaaggg aagctggtgt gagcagcagc tgtgtgcctg 360
 tgacaaggag gtggccttct gcctgaagcg caacctggac acctaccaga agcgactgcg 420
 tttctactgg cggccccact gccgggggca gaccctggg tgctagaagc ccacaccctc 480
 taccctgttc ctcagcatgg agctctggca tccccacctc agtatctaac ctgaaccagc 540
 ctggccttttc aaacactcgg gggggaggta gtcccagcct cccccggaac cc 592

<210> 5
 <211> 2204
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> 28, 30
 <223> a or g or c or t, unknown, or other

<220>
 <221> misc_feature
 <223> Incyte ID No: 1430683CB1

<400> 5
 catggttttg ggcgcagaga gggcaggan accaaggag agaagagggg aaattgcgcc 60
 cttttgggtg gaagctgtta tggtggacc ttaaataatc ttcgtagagt tgcgcccac 120
 cctggccctc tgtcttgaga gagggtctc tcacctcaca gacacaggat tattggtcct 180
 tttctgcccc gccccctgcc cttttttttt tttttttgag atggagtctc tctctgtcgc 240

```

ccaggctgga gtgcaatggc gtgatcttgg ctactgcaa cctccgcctc tggggttcaa 300
gcgattctcc tgcctcagcc tcccagtag ctgggattac agactgaggg agctggccgt 360
gcgactgggc ttcgggccct gtgcagagga gcaggccttc ctgagcagga ggaagcaggt 420
ggtggccgcg gccttgaggg aggccctgca gctggatgga gacctgcagg aggatgagat 480
cccagtggta gctattatgg ccactgggtg tgggatccgg gcaatgactt cctgtatgg 540
gcagctggct ggcctgaagg agctgggcct cttggattgc gtctcctaca tcaccggggc 600
ctcgggctcc acctgggcct tggccaacct ttatgaggac ccagagtggg ctcagaagga 660
cctggcaggg ccactgagt tgctgaagac ccaggtgacc aagaacaagc tgggtgtgct 720
ggccccagc cagctgcagc ggtaccggca ggagctggcc gagcgtgccc gcttgggcta 780
cccaagctgc ttcaccaacc tgtgggccct catcaacgag gcgctgctgc atgatgagcc 840
ccatgatcac aagctctcag atcaacggga ggccctgagt catggccaga accctctgcc 900
catctactgt gccctcaaca ccaaagggca gagcctgacc acttttgaat ttggggagtg 960
gtgcgagttc tctccctacg aggtcggctt cccaagtac ggggccttca tcccctctga 1020
gctctttggc tccgagttct ttatggggca gctgatgaag aggcttcctg agtcccgcat 1080
ctgcttctta gaaggtatct ggagcaacct gtatgcagcc aacctccagg acagctata 1140
ctgggcctca gagcccagcc agttctggga ccgctgggtc aggaaccagg ccaacctgga 1200
caaggagcag gtcccccttc tgaagataga agaaccaccc tcaacagccg gcagaatagc 1260
tgagtttttc accgatcttc tgacgtggcg tccactggcc caggccacac ataatttct 1320
gcggtggcctc catttccaca aagactactt tcagcatcct cacttctcca catggaaaagc 1380
taccactctg gatgggctcc ccaaccagct gacacctcg gagccccacc tgtgcctgct 1440
ggatgttggc tacctcatca ataccagctg cctgccccctc ctgcagccca ctcgggacgt 1500
ggacctcact ctgtcattgg actacaacct ccacggagcc ttccagcagt tgcagctcct 1560
gggcgggttc tgccaggagc aggggatccc gttcccaccc atctcgccca gccccgaaga 1620
gcagctccag cctcgggagt gccacacctt ctccgacccc acctgccccg gagccccctgc 1680
ggtgctgcac ttttctctg gggtcggcg gaccccagag gaggcggcag ctggggaggt 1740
gaacctgtct tcatcggact ctccctacca ctacacgaag gtgacctaca gccaggagga 1800
cgtggacaag ctgctgcacc tgacacatta caatgtctgc aacaaccagg agcagctgct 1860
ggaggctctg cgccaggcag tgcagcggag gcggcagcgc aggccccact gatggccggg 1920
gccccgcca cccctaactc tcattcattc cctggctgct gagttgcagg tgggaactgt 1980
catcacgcag tgcttcagag cctcgggctc aggtggcact gtcccagggt ccaggctgag 2040
ggctgggagc tcccttgcc ctcagcagtt tgcagtgggg taaggaggcc aagcccattt 2100
gtgtaatcac ccaaaacccc ccggcctgtg cctgttttcc cttctgcgct accttgagta 2160
gttgaggcac ttgatacatc acagactcat aaaaaaaaaa aaaa 2204

```

<210> 6

<211> 1746

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> Incyte ID No: 1316804CB1

<400> 6

```

cagctctgag atttccagct cagcgatgcc cccaggctcc tgggagagct gcttctgggt 60
ggggggcctc attttgtggc tcagcgttgg aagttcaggg gatgcacctc ctaccccaca 120
gccaaagtgc gctgacttcc agagcgccaa ctttttgaa ggcaccgatc tcaaagtcca 180
gtttctctc tttgtccctt cgaatcctag ctgtgggcag ctagtagaag gaagcagtga 240
cctccaaaac tctgggttca atgccactct gggaacccaa ctaattatcc atggattcag 300
ggttttagga acaaagcctt cctggattga cacatttatt agaacccttc tgcgtgcaac 360
gaatgctaata gtgattgccg tggactggat ttatgggtct acaggagtct acttctcagc 420
tgtgaaaaat gtgattaagt tgagcctcga gatctccctt ttctcaata aactcctggt 480
gctgggtgtg tcggaatcct caatccacat cattgggtgt agcctggggg cccacgttgg 540
gggcatggtg ggacagctct tcggaggcca gctgggacag atcacaggcc tggaccccg 600
tggacctgag tacaccaggg ccagtgtgga agagcgcttg gatgctggag atgccctctt 660

```

```

cgtggaagcc atccacacag acaccgacaa tttgggtatt cggattcccg ttggacatgt 720
ggactacttc gtcaacggag gccaagacca acctggctgc cccaccttct tttacgcagg 780
ttatagttat ctgatctgtg atcacatgag ggctgtgcac ctctacatca gcgccctgga 840
gaattcctgt ccaactgatgg cctttccctg tgccagctac aaggccttcc ttgctggacg 900
ctgtctggat tgctttaacc cttttctgct ttctgcccc aggataggac tgggtgaaca 960
aggtggtgtc aagatagagc cgctcccaa ggaagtgaag gtctacctcc tgactacttc 1020
cagtgtcccg tactgcatgc atcacagcct cgtggagttt cacttgaagg aactgagaaa 1080
caaggacacc aacatcgagg ttaccttcct tagcagtaac atcacctctt catctaagat 1140
caccatacct aagcagcaac gctatgggaa aggaatcata gcccattgcca cccacaatg 1200
ccagataaac caagtgaat tcaagtttca gtcttccaac cgagtttgga aaaaagaccg 1260
gactaccatt attgggaagt tctgcactgc ctttttgctt gtcaatgaca gagaaaagat 1320
ggctctgctta cctgaaccag tgaacttaca agcaagtgtg actgtttcct gtgacctgaa 1380
gatagcctgt gtgtagttaa acctgggcag gacacatctc cctgcatttt tttttttttt 1440
tgagagagag gtgtgatgag ggatgtgtgt gtgcagctta ttgtagacca ttactactaa 1500
ggagaaaagc aaagctcttt cttattttcc tcataatcag ctaccctgga ggggaggagg 1560
aactcatttt acagaacttg gtttcctttg ccgatcttat gtacataccc attttagctt 1620
tcccatgcat acttaactgc acttgcttta tctccttggg cattcgtact taggattcaa 1680
tagaaacatg tacagggtaa acaatttttt aaaaataaaa cttcatggag tatctgaaaa 1740
aaaaaa 1746

```

<210> 7

<211> 146

<212> PRT

<213> Rattus norvegicus

<220>

<221> misc_feature

<223> GenBank ID No: g204319

<400> 7

```

Met Lys Val Leu Leu Leu Leu Ala Val Val Ile Met Ala Phe Gly
  1                      5                      10                      15
Ser Ile Gln Val Gln Gly Ser Leu Leu Glu Phe Gly Gln Met Ile
                      20                      25                      30
Leu Phe Lys Thr Gly Lys Arg Ala Asp Val Ser Tyr Gly Phe Tyr
                      35                      40                      45
Gly Cys His Cys Gly Val Gly Gly Arg Gly Ser Pro Lys Asp Ala
                      50                      55                      60
Thr Asp Trp Cys Cys Val Thr His Asp Cys Cys Tyr Asn Arg Leu
                      65                      70                      75
Glu Lys Arg Gly Cys Gly Thr Lys Phe Leu Thr Tyr Lys Phe Ser
                      80                      85                      90
Tyr Arg Gly Gly Gln Ile Ser Cys Ser Thr Asn Gln Asp Ser Cys
                      95                      100                     105
Arg Lys Gln Leu Cys Gln Cys Asp Lys Ala Ala Ala Glu Cys Phe
                      110                     115                     120
Ala Arg Asn Lys Lys Ser Tyr Ser Leu Lys Tyr Gln Phe Tyr Leu
                      125                     130                     135
Asn Lys Phe Cys Lys Gly Lys Thr Pro Ser Cys
                      140                     145

```

<210> 8

<211> 748

<212> PRT

<213> Gallus gallus

<220>

<221> misc_feature

<223> GenBank ID No: g508625

<400> 8

Met	Ser	Phe	Ile	Asp	Pro	Tyr	Gln	His	Ile	Val	Val	Glu	His	Gln
1				5					10					15
Tyr	Ser	His	Val	Phe	Thr	Val	Thr	Val	Arg	Lys	Ala	Thr	Asn	Val
				20					25					30
Thr	Lys	Gly	Ala	Ile	Gly	Asp	Met	Leu	Asp	Thr	Pro	Asp	Pro	Tyr
				35					40					45
Val	Glu	Leu	Phe	Ile	Pro	Ser	Ala	Pro	Asp	Cys	Arg	Lys	Arg	Thr
				50					55					60
Lys	His	Phe	Asn	Asn	Asp	Val	Asn	Pro	Val	Trp	Asn	Glu	Thr	Phe
				65					70					75
Glu	Phe	Ile	Leu	Asp	Pro	Asn	Gln	Asp	Asn	Val	Leu	Glu	Val	Thr
				80					85					90
Leu	Met	Asp	Ala	Asn	Tyr	Val	Met	Asp	Glu	Thr	Leu	Gly	Met	Ala
				95					100					105
Thr	Phe	Pro	Ile	Ser	Ser	Leu	Lys	Leu	Gly	Glu	Lys	Lys	Glu	Val
				110					115					120
Gln	Leu	Thr	Phe	Asn	Asn	Val	Thr	Glu	Met	Thr	Leu	Glu	Leu	Ser
				125					130					135
Leu	Glu	Val	Cys	Ser	Ser	Thr	Asp	Leu	Arg	Phe	Ser	Met	Ala	Leu
				140					145					150
Cys	Asp	Glu	Glu	Lys	Lys	Phe	Arg	Gln	Gln	Arg	Lys	Asp	Asn	Ile
				155					160					165
Met	Gln	Ser	Met	Lys	Ser	Phe	Leu	Gly	Glu	Glu	Asn	Ser	Lys	Asn
				170					175					180
Leu	Thr	Thr	Ser	Arg	Asp	Val	Pro	Val	Ile	Ala	Val	Leu	Gly	Ser
				185					190					195
Gly	Gly	Gly	Phe	Arg	Ala	Met	Val	Gly	Phe	Ala	Gly	Val	Met	Lys
				200					205					210
Ala	Leu	Tyr	Glu	Ser	Gly	Val	Leu	Asp	Cys	Ala	Thr	Tyr	Ile	Ala
				215					220					225
Gly	Leu	Ser	Gly	Ser	Thr	Trp	Tyr	Met	Ser	Thr	Leu	Tyr	Ser	His
				230					235					240
Pro	Asp	Phe	Pro	Glu	Lys	Gly	Pro	Lys	Glu	Ile	Asn	Gln	Glu	Leu
				245					250					255
Met	Asn	Ser	Val	Ser	His	Asn	Pro	Leu	Leu	Leu	Leu	Thr	Pro	Gln
				260					265					270
Lys	Val	Lys	Arg	Tyr	Ile	Glu	Ala	Leu	Trp	Asn	Lys	Lys	Ser	Ser
				275					280					285
Gly	Gln	Pro	Val	Thr	Phe	Thr	Asp	Ile	Phe	Gly	Met	Leu	Ile	Gly
				290					295					300
Glu	Thr	Leu	Ile	His	Asn	Arg	Met	Asp	Thr	Thr	Leu	Ser	Asp	Met
				305					310					315
Lys	Glu	Lys	Val	Ser	Glu	Ala	Gln	Cys	Ala	Leu	Pro	Leu	Phe	Thr
				320					325					330
Cys	Leu	His	Val	Lys	Pro	Asp	Val	Ser	Glu	Leu	Met	Phe	Ala	Asp
				335					340					345
Trp	Val	Glu	Phe	Ser	Pro	Tyr	Glu	Ile	Gly	Met	Ala	Lys	Tyr	Gly
				350					355					360
Thr	Phe	Met	Ser	Pro	Asp	Leu	Phe	Gly	Ser	Lys	Phe	Phe	Met	Gly

	365		370		375
Thr Val Val Lys	Lys Tyr Ser Glu Asn	Pro Leu His Phe Leu	Met		
	380		385		390
Gly Val Trp Gly	Ser Ala Phe Ser Ile	Leu Phe Asn Arg Val	Leu		
	395		400		405
Gly Val Ser Asn	Ser Gln Asn Lys Gly	Pro Thr Met Glu Glu	Glu		
	410		415		420
Leu Glu Asn Ile	Arg Leu Lys His Leu	Val Ser Asn Asp Ser	Ser		
	425		430		435
Asp Ser Glu Asp	Glu Ser Gln His Pro	Lys Gly Thr Glu Asn	Ser		
	440		445		450
Glu Ala Asn Glu	Glu Tyr Gln Asn Ser	Ser Gln Glu Ser Trp	Val		
	455		460		465
Gln Arg Met Leu	Met Ala Leu Val Gly	Asp Ser Ala Leu Phe	Asn		
	470		475		480
Thr Arg Glu Gly	Arg Ala Gly Lys Val	His Asn Phe Met Leu	Gly		
	485		490		495
Leu Asn Leu Asn	Ser Cys Tyr Pro Leu	Ser Pro Leu Ala Asp	Leu		
	500		505		510
Leu Thr Gln Glu	Ser Val Glu Glu Asp	Glu Leu Asp Ala Ala	Val		
	515		520		525
Ala Asp Pro Asp	Glu Phe Glu Arg Ile	Tyr Glu Pro Leu Asp	Val		
	530		535		540
Lys Ser Lys Lys	Ile His Ile Val Asp	Ser Gly Leu Thr Phe	Asn		
	545		550		555
Leu Pro Tyr Pro	Leu Ile Leu Arg Pro	Gln Arg Gly Val Asp	Leu		
	560		565		570
Ile Ile Ser Phe	Asp Phe Ser Ala Arg	Pro Ser Asp Ser Ser	Pro		
	575		580		585
Pro Phe Lys Glu	Ile Leu Leu Ala Glu	Lys Trp Ala Lys Met	Asn		
	590		595		600
Lys Leu Pro Phe	Pro Lys Ile Asp Pro	Asn Val Phe Asp Arg	Glu		
	605		610		615
Gly Leu Lys Glu	Cys Tyr Val Phe Lys	Pro Lys Asp Thr Ser	Ser		
	620		625		630
Glu Lys Asp Cys	Pro Thr Ile Ile His	Phe Val Leu Ala Asn	Ile		
	635		640		645
Asn Phe Arg Lys	Tyr Lys Ala Pro Gly	Leu Pro Arg Glu Ser	Lys		
	650		655		660
Glu Glu Lys Asp	Phe Ala Asp Phe Asp	Ile Phe Asp Asp Pro	Asn		
	665		670		675
Thr Pro Phe Ser	Thr Phe Asn Phe Gln	Tyr Pro Asn Glu Ala	Phe		
	680		685		690
Lys Arg Leu His	Asp Leu Met Glu Phe	Asn Thr Leu Asn Asn	Leu		
	695		700		705
Asp Val Ile Lys	Gln Ala Met Met Glu	Ser Ile Glu Tyr Arg	Lys		
	710		715		720
Glu Asn Pro Ser	Arg Cys Ser Val Ser	Leu Ser Ser Val Glu	Ala		
	725		730		735
Arg Arg Phe Phe	Asn Lys Asn Asn Leu	Asn Asn His Thr			
	740		745		

<210> 9

<211> 456

<212> PRT

<213> Rattus norvegicus

<220>

<221> misc_feature

<223> GenBank ID No: g1817556

<400> 9

Met	Cys	Pro	Gly	Leu	Trp	Gly	Thr	Cys	Phe	Trp	Leu	Trp	Gly	Ser
1				5					10					15
Leu	Leu	Trp	Leu	Ser	Ile	Gly	Arg	Ser	Gly	Asn	Val	Pro	Pro	Thr
				20					25					30
Thr	Gln	Pro	Lys	Cys	Thr	Asp	Phe	Gln	Ser	Ala	Asn	Leu	Leu	Arg
				35					40					45
Gly	Thr	Asn	Leu	Lys	Val	Gln	Phe	Leu	Leu	Phe	Thr	Pro	Ser	Asp
				50					55					60
Pro	Gly	Cys	Gly	Gln	Leu	Val	Glu	Glu	Asp	Ser	Asp	Ile	Arg	Asn
				65					70					75
Ser	Glu	Phe	Asn	Ala	Ser	Leu	Gly	Thr	Lys	Leu	Ile	Ile	His	Gly
				80					85					90
Phe	Arg	Ala	Leu	Gly	Thr	Lys	Pro	Ser	Trp	Ile	Asn	Lys	Phe	Ile
				95					100					105
Arg	Ala	Leu	Leu	Arg	Ala	Ala	Asp	Ala	Asn	Val	Ile	Ala	Val	Asp
				110					115					120
Trp	Val	Tyr	Gly	Ser	Thr	Gly	Met	Tyr	Phe	Ser	Ala	Val	Glu	Asn
				125					130					135
Val	Val	Lys	Leu	Ser	Leu	Glu	Ile	Ser	Arg	Phe	Leu	Ser	Lys	Leu
				140					145					150
Leu	Glu	Leu	Gly	Val	Ser	Glu	Ser	Ser	Ile	His	Ile	Ile	Gly	Val
				155					160					165
Ser	Leu	Gly	Ala	His	Val	Gly	Gly	Met	Val	Gly	His	Phe	Tyr	Lys
				170					175					180
Gly	Gln	Leu	Gly	Arg	Ile	Thr	Gly	Leu	Asp	Pro	Ala	Gly	Pro	Glu
				185					190					195
Tyr	Thr	Arg	Ala	Ser	Leu	Glu	Glu	Arg	Leu	Asp	Ser	Gly	Asp	Ala
				200					205					210
Leu	Phe	Val	Glu	Ala	Ile	His	Thr	Asp	Thr	Asp	Asn	Leu	Gly	Ile
				215					220					225
Arg	Ile	Pro	Val	Gly	His	Val	Asp	Tyr	Phe	Val	Asn	Gly	Gly	Gln
				230					235					240
Asp	Gln	Pro	Gly	Cys	Pro	Ala	Phe	Ile	His	Ala	Gly	Tyr	Ser	Tyr
				245					250					255
Leu	Ile	Cys	Asp	His	Met	Arg	Ala	Val	His	Leu	Tyr	Ile	Ser	Ala
				260					265					270
Leu	Glu	Asn	Thr	Cys	Pro	Leu	Met	Ala	Phe	Pro	Cys	Ala	Ser	Tyr
				275					280					285
Lys	Ala	Phe	Leu	Ala	Gly	Asp	Cys	Leu	Asp	Cys	Phe	Asn	Pro	Phe
				290					295					300
Leu	Leu	Ser	Cys	Pro	Arg	Ile	Gly	Leu	Val	Glu	Arg	Gly	Gly	Val
				305					310					315
Lys	Ile	Glu	Pro	Leu	Pro	Lys	Glu	Val	Arg	Val	Tyr	Leu	Gln	Thr
				320					325					330
Thr	Ser	Ser	Ala	Pro	Tyr	Cys	Val	His	His	Ser	Leu	Val	Glu	Phe
				335					340					345
Asn	Leu	Lys	Glu	Lys	Arg	Lys	Lys	Asp	Thr	Ser	Ile	Glu	Val	Thr
				350					355					360
Phe	Leu	Gly	Asn	Asn	Val	Thr	Ser	Ser	Val	Lys	Ile	Thr	Ile	Pro

	365		370		375
Lys Asp His Leu	Glu Gly Arg Gly Ile	Ile Ala His Gln Asn Pro			
	380		385		390
His Cys Gln Ile	Asn Gln Val Lys Leu	Lys Phe His Ile Ser Ser			
	395		400		405
Arg Val Trp Arg	Lys Asp Arg Thr Pro	Ile Val Gly Thr Phe Cys			
	410		415		420
Thr Ala Pro Leu	Pro Val Asn Asp Ser	Lys Lys Thr Val Cys Ile			
	425		430		435
Pro Glu Pro Val	Arg Leu Gln Val Ser	Met Ala Val Leu Arg Asp			
	440		445		450
Leu Lys Met Ala Cys Val					
	455				

<210> 10
 <211> 5
 <212> PRT
 <213> Homo sapiens

<220>
 <221> unsure
 <222> 2, 4
 <223> unknown, or other

<220>
 <221> misc_feature
 <223> motif

<400> 10
 Gly Xaa Ser Xaa Gly
 1 5